

LXIV.—Notes on a Collection of Gryllidæ, Stenopelmatidæ, Gryllacridæ, and Hetrodidæ formed by Mr. W. L. Distant in the Transvaal and other South- and East-African Localities. By W. F. KIRBY, F.L.S., F.E.S., &c.

THE following list is preliminary to Mr. Distant's comprehensive work on the Insects of the Transvaal, now in course of preparation, and may be followed from time to time by other lists of a similar character.

Two new species of Stenopelmatidæ are provisionally referred to *Carcinopsis*; but they differ somewhat in the structure of the head, and it is probable that many species of the family remain to be discovered, which may necessitate a revision of the generic characters.

ORTHOPTERA.

Gryllidæ.

GRYLLOTALPINÆ.

Curtilla, Oken.
africana, Beauv.

GRYLLINÆ.

Brachytrypes, Serv.
membranaceus, Dru.
Acheta, Linn.
bimaculata, De Geer.
Gryllus, Linn.
domesticus, Linn.
burdigalensis, Latr.
posticus, Walk.
ignobilis, Walk.
melanocephalus, Serv., var.
Cophogryllus, Sauss.
Delalandii, Sauss.
Scupsipedus, Sauss.
marginatus, Afz. & Brann.

E NEOPTERINÆ.

Anandus, Sauss.
nigrosignatus, Stål.

Stenopelmatidæ.

Carcinopsis, Brunn.
vittata, sp. n.
punctulata, sp. n.
Nasilius, Stål.
truncatifrons, Stål.

Gryllacridæ.

Gryllacris, Serv.
lyrata, n. n.
(= *|| aliena*, Brunn.)

Hetrodidæ.

Acanthoplus, Stål.
discoidalis, Walk.
Enyaliopsis, Karsch.
Petersii, Schaum.
Acanthoproctus, Karsch.
Howarthæ, Kirb.

Gryllidæ.

GRYLLOTALPINÆ.

Curtilla africana.

Gryllotalpa africana, Pal. de Beauv. Ins. Afr. Amér. p. 229, Orth. pl. xx. c. fig. 6 (1805?).

4, Pretoria (*Distant*); 1, Barberton (*Rendall*); 3 (immature), Fort Johnston, Nyasaland (*Rendall*).

A common species throughout the warmer parts of the Old World.

GRYLLINÆ.

Brachytrypes membranaceus.

Gryllus membranaceus, Dru. Ill. Ex. Ent. ii. pl. xliii. fig. 2 (1773).

3, Fort Johnston, Nyasaland (*P. Rendall*); 1, Barberton (*Rendall*); 1, Delagoa Bay (*Junod*).

A common and widely distributed African species.

Acheta bimaculata.

Gryllus bimaculatus, De Geer, Mém. Ins. iv. p. 521. n. 4, pl. xliii. fig. 4 (1773).

7, Pretoria (*Distant*); 2, Nyasaland (*Rendall*); 3, Barberton (*Rendall*); and 1 without locality.

One or two of these specimens are immature.

A common species throughout the warmer parts of the Old World.

Gryllus domesticus.

Gryllus domesticus, Linn. Syst. Nat. (ed. x.) i. p. 423. n. 20 (1758).

6, Fort Johnston, Nyasaland (*Rendall*).

Our familiar house-cricket; a cosmopolitan species at the present day.

Gryllus burdigalensis.

Gryllus burdigalensis, Latr. Hist. Nat. Crust. Ins. xii. p. 124. n. 3 (1804); Sauss. Mém. Soc. Gèneve, xxv. (1) p. 185 (1875).

4 ♀, Pretoria (*Distant*).

A variable and widely distributed species in the Mediterranean region, Asia, and Africa. There are also two immature specimens from Pretoria which probably belong to the same species.

Gryllus posticus.

Gryllus posticus, Walk. Cat. Derm. Salt. i. p. 30. n. 50 (1869).

Gryllus leucostomus, Sauss. Mém. Soc. Gèneve, xxv. p. 167 (1877).

Fort Johnston, Nyasaland (*Rendall*).

I think De Saussure is mistaken in referring this species to *G. leucostomus*, Serv., and therefore prefer to adopt Walker's name for it.

Gryllus ignobilis.

Gryllus ignobilis, Walk. Cat. Derm. Salt. i. p. 29. n. 47 (1869).

1, Fort Johnston, Nyasaland (*Rendall*); 1, Barberton (*Rendall*).

Originally described from Natal. *G. ignobilis*, Sauss., from Java and Amboina, will require renaming.

Gryllus melanocephalus, var.

Gryllus melanocephalus, Serv. Ins. Orth. p. 342 (1839).

2, Nyasaland (*P. Rendall*).

A variable species, inhabiting Africa and the East Indies.

Cophogryllus Delalandii, var. (?).

Cophogryllus Delalandii, Sauss. Mém. Soc. Génève, xxv. p. 234, pl. xiii. (13) fig. 2 (1877).

1, Brak Kloof, near Grahamstown.

Closely resembles Saussure's description and figure, but has six testaceous lines on the vertex, the two outer ones on each side meeting at the eyes. There is a black arch between the antennæ over a testaceous space, separated from the black vertex by a narrower testaceous arch.

Scapsipedus marginatus.

Acheta marginata, Afzel. & Brann. Achet. Guin. p. 23. n. 4, fig. 5 a (1804).

Scapsipedus marginatus, Sauss. Mém. Soc. Génève, xxv. p. 243 (1876).

Gryllus parallelus, Walk. Cat. Derm. Salt. i. p. 32. n. 53 (1869).

Gryllus diadematus, Gerst. Von der Decken's Reisen, iii. (2) p. 25. n. 37 (1873).

8, Pretoria (*Distant*).

A species inhabiting both East and West Africa.

ENEOPTERINÆ.

Anandus nigrosignatus.

Rupilius nigrosignatus, Stål, Öfv. Vet.-Akad. Förh. 1876, (3) p. 66.

Anandus nigrosignatus, Sauss. Mém. Soc. Génève, xxv. p. 654 (1878).

1, Rustenburg (*Krantz*).

The markings of this species are not unlike those in Saussure's figure of his *Tapinopus platyceps*, from New Caledonia.

Stenopelmatidæ.

Carcinopsis vittata.

Long. corp. 31-40 millim.; pronoti 9-10 millim.; fem. post. 17 millim.; tib. post. 23-26 millim.; ovip. 15-19 millim.

Female.—Chestnut-brown, face varied with yellow; fastigium of the vertex with a yellow spot on each side opposite the base of the antennæ, and two more at the extremity, which is depressed, convergent, and truncated, separated from the fastigium of the front by a slight suture; the middle and sides of the face, as well as the antennæ, palpi, and legs, are mostly yellowish.

Pronotum with the deflexed lobes having the angles rounded off and the lower border nearly straight. Abdomen with a broad transverse black band occupying the hinder part of each segment.

All the femora unarmed; front tibiæ with a middle and terminal spine on the inner side above, but only the terminal spine on the outer side; beneath, with a row of 5 strong spines on each side. Middle tibiæ with 4 spines above on the outside and 3 on the inside; beneath, with 5 spines on each side. Hind tibiæ with a row of 7 spines on each side above in addition to the terminal spines; beneath, with 3 slender spines before the terminal spines. Most of the spines are very strong and tipped with black. The spines on the four hind coxæ are also strongly marked. Hind femora much thickened; ovipositor long, slender, upcurved.

Two specimens from Barberton (*P. Rendall*).

Described from the larger specimen; the smaller one is considerably paler in colour, inclining to reddish or yellowish rather than reddish brown.

Probably allied to *C. ornata*, Bruun., from Madagascar; but that species is banded with black on the thorax and the tibial spines are much smaller, as represented in the figure.

Carcinopsis punctulata.

Long. corp. 29 millim.; pronoti 7-9 millim.; fem. post. 18-20 millim.; tib. 15-18 millim.; ovip. 10-15 millim.

Female.—Head, pronotum, and femora rufo-castaneous, rest of legs and ovipositor darker, hind border of pronotum and abdomen aneous brown.

Head above and pronotum nearly smooth; fastigium of the vertex transversely wrinkled below, passing into the fastigium of the front without interruption. Face thickly punctured and blackish in the middle; cheeks reddish, with

two strong converging carinæ; mouth-parts and tips of mandibles mostly black. Pronotum with the angles of the deflexed lobes rounded off, the lower edge nearly straight.

Abdomen thickly and closely punctured, especially on the terminal segments.

Femora unarmed; front tibiæ with 2 spines above on the inner side and with only the terminal one on the outer; beneath, with 5 pairs of spines; middle tibiæ with 3 or 4 spines on each side above and 6 pairs below (inclusive of the terminal ones); hind tibiæ with 7 spines on the outside and 8 on the inside (exclusive of the terminal spines); hind femora considerably thickened and very deeply longitudinally sulcated on the outer side.

1, near Eureka, Barberton (*P. Rendall*), type; 1, Zoutpansberg (*Kæssner*).

As usual, the larger specimen, which is here described, is darker-coloured than the other.

This species may be allied to *C. femoralis* and *C. fusca*, Brunn., but nothing is said of their being punctuated.

Nasidius truncatifrons.

Nasidius truncatifrons, Stål.

2, Barberton (*Rendall*); 1, Zomba, Nyasaland (*Rendall*).

Gryllacridæ.

Gryllacris lyrata, n. n.

Gryllacris aliena, Brunner (nec Walker), Verh. zool.-bot. Ges. Wien, xxxviii. p. 338 (1888).

1, Pretoria (*Distant*); 3 (immature), Barberton (*P. Rendall*).

As this species requires renaming, I have taken the present opportunity of doing so. It was described by Brunner from Zanzibar, and the Natural History Museum possesses a pair from Machuma, Taru Desert, British East Africa, collected by Mr. C. S. Betton.

Hetrodidæ.

Acanthoplus discoidalis.

Hetrodes discoidalis, Walk. Cat. Derm. Salt. B. M. ii. p. 230. n. 18 (1869).

1, Pretoria (*Distant*); 1, Zoutpansberg (*Kæssner*).

These specimens agree with the paler specimen described

by Walker, except that they are of a reddish brown, reddish on the thorax. The abdomen has a row of spines pointing backwards on the median line and three rows of large black oblong spots on the back and sides; the median row macular, the lateral rows partly connected behind, and each marked rather behind its centre with a large reddish dot. On the basal segments the black markings are more or less connected at the base of the segments.

Enyaliopsis Petersii.

Heterodes Petersii, Schaum, Ber. Ver. Akad. Berl. 1853, p. 777; Peters's Reise Mossamb. v. p. 119, pl. vii. fig. 7 (1862).

1, Pretoria (*Distant*); 3, Barberton (*Rendall*); 2, Fort Johnston, Nyasaland (*Rendall*); 1, Angola (*Monteiro*).

The frontal horn in some of these specimens is shorter and broader than usual. There are two immature specimens among them.

Acanthoproctus Howarthæ.

Acanthoproctus Howarthæ, Kirb. Ann. & Mag. Nat. Hist. (7) iii. pp. 101, 145 (1899).

1, Brak Kloof, near Grahamstown.

The types were received from E. Karoo, Cape Colony.

LXV.—*On one little-known and one hitherto unknown Species of Saurocephalus.* By O. P. HAY*.

THE fish *Saurocephalus lanciformis* was first described and named by Dr. Richard Harlan in 1824 †. This description and the accompanying figures were reprinted in 1835 in the same author's 'Medical and Physical Researches' ‡. The specimen on which the genus and species were based had been collected about twenty years previously, by Lewis and Clark, at some locality probably in North-eastern Nebraska. It consisted of the greater portion of the left maxilla; but was described by Harlan as belonging to the lower jaw. He also regarded it as having belonged to a reptile allied to *Ichthyosaurus*. Louis Agassiz first recognized the ichthyic

* From the 'American Journal of Science,' April 1899, pp. 299-304.

† Journ. Acad. Nat. Sci. Philad. (1) iii. pp. 331-337, pl. xii. figs. 1-5.

‡ Med. Phys. Res. pp. 362-366, pl., figs. 1-5.